

Professional and Managerial Branch
Engineering Group
Registered Engineer Series

TRAFFIC ENGINEER III

12/00 (LBT)

Summary

Under direction, as functional head of a traffic engineering staff unit manage and independently execute programs and associated practices in compliance with department policies.

Typical Duties

Direct and perform drafting, computational and design in the preparation of plans and specifications for traffic engineering projects. Involves: recommending geometric design of projects; preparing specifications and determining project costs; monitoring and guiding preparation and drafting of designs for traffic signal installation, computerized signal system, intersection improvements and other traffic control projects; checking horizontal and vertical curves for sight, distance, radius, safety lighting and alignment.

Direct inspection and testing of workmanship and materials used in contract traffic control project. Involves: assigning inspection and testing of solid state traffic control equipment; reviewing and interpreting plans and specifications of work being done under contract.

Conferring with citizens and officials to resolve requests for traffic control improvements. Involves: studying traffic flow to detect unsafe or congested conditions; evaluating statistical and physical data; conducting tests with the same or alternate routes with modifications in traffic control devices and techniques; computing traffic signal timing; determining if traffic signals are warranted; integrating results of studies with other agencies to develop regional traffic plan.

Supervise technical and engineering personnel as assigned. Involves: determining and preparing work schedules, and expediting work flow; assigning duties, issuing written and oral instructions and checking work for exactness, neatness, and conformance to policies and procedures; guiding subordinate in overcoming difficulties encountered in performing duties; evaluating performance, coaching, and arranging for or conducting training and development activities; enforcing personnel rules and regulations, standards of conduct, work attendance and safe working practices; maintaining supervisor-subordinate harmony and resolving grievances; making recommendations on personnel changes which includes interviewing applicants.

Perform related duties as required. Involves: substituting, if assigned, for immediate supervisor during temporary absences by performing delegated duties and responsibilities sufficient to maintain continuity of normal operations and similarly performing any duties of subordinates or coworkers; overseeing and personally engaging in preparation of technical reports, records and studies; preparing and delivering presentations to public groups.

Minimum Qualifications

Training and Experience: Graduation from an accredited college or university with a Bachelor's Degree in Civil, Electrical, Computer, Mechanical, Traffic Engineering or related engineering field and four (4) years of professional traffic engineering experience and two (2) years in a supervisory capacity; or an equivalent combination of training and experience.

Knowledge, Abilities and Skills: Considerable knowledge of: the principles and practices of traffic engineering; methods, materials, tools and equipment used in traffic controls; cost determination techniques. Good knowledge of: supervisory techniques, standards of conduct and work attendance; safe working practices and procedures; federal, state and local laws, codes and ordinances as they apply to traffic control projects.

Ability to: prepare plans, designs and specifications of traffic control projects; determine project costs; interpret plans and identify defects; express oneself clearly and concisely, both orally and in writing; establish and maintain effective working relationships with fellow employees, officials and the general public by persuasively presenting information to respond to common inquiries and complaints of individuals or groups; firmly and impartially exercise delegated supervisory authority in the supervision and evaluation of subordinate personnel.

Skill in the safe operation and care of: personal computer or network work station, including computer-aided drafting and design (CADD), geographic information system (GIS), word processing, spreadsheets and database software; standard drafting instruments; time and distance measuring devices; motor vehicle through city traffic.

Physical Effort & Work Environment: Occasionally inspect field installations at construction sites which involves

moving about uneven terrain, climbing, ladders, bending and stooping and exposure to other adverse field conditions.

Special Requirement: Respond to Public Works emergencies as necessary during non-working hours.

Licenses and Certificates: Valid Texas Professional Engineer License by time of application, or equivalent transferable from another state which must be converted to Texas Registration within one (1) year following appointment; valid Texas Class "C" Driver's license or equivalent issued by another state by time of appointment.

Director of Personnel

Department Head

OFFICIAL